1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/08/826,361B

DATE: 08/21/2003
TIME: 16:25:18

Input Set : A:\2355-124 Seq List.txt
Output Set: N:\CRF4\08212003\H826361B.raw

P.6

3 <110> APPLICANT: Mosselman, Sietse
4 Dijkema, Rein
6 <120> TITLE OF INVENTION: Novel Estrogen Receptor
8 <130> FILE REFERENCE: 0/96193 US
C--> 10 <140> CURRENT APPLICATION NUMBER: US/08/826,361B
C--> 10 <141> CURRENT FILING DATE: 1997-03-26
10 <150> PRIOR APPLICATION NUMBER: US 08/826,361
11 <151> PRIOR FILING DATE: 1997-03-26
13 <150> PRIOR APPLICATION NUMBER: EP 96203284.3
14 <151> PRIOR FILING DATE: 1996-11-22
16 <150> PRIOR APPLICATION NUMBER: EP 96200820.7
17 <151> PRIOR FILING DATE: 1996-03-26
19 <160> NUMBER OF SEQ ID NOS: 32
21 <170> SOFTWARE: PatentIn version 3.0
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 1434
25 <212> TYPE: DNA
27 <213> ORGANISM: Homo sapiens
28 <100> SEQUENCE: 1

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agttatcaac atctgtatgc ggaacctcaa aagagtcccct ggtgtgaagc aagatggcta     180
gaacacacct tacctttaaa tagagagaca ctgaaaaggg aggttagtgg gaacggttgc     240
gccagccctg ttactggtcc agattcaaag agggatgctc acttctgcgc tgtctgcagc     300
gattacggcat cgggatatca ctatggagtc tggtcgtgtg aaggatgtaa ggccttttct     360
aaaaagaagca ttcaaggaca tatgattatt atttgtccag ctacaaatca gtgtacaatc     420
gatagaaaac ggcgcaagag ctgccaggcc tgccgacttc ggaagtgtta cgaagtgggg     480
atggtgaagt gtggctccg gagagagaga tgtgggtacc gccttgtgcg gagacagaga     540
actgccgacg agcagctgca ctgtgccggc aaggccaaga gaagtggcgg ccacgcgccc     600
cgagtggcgg agctgctgct cgagccctg agcccggagc agctagtgct caccctcctg     660
gaggctgagc cgccccatgt ctgatcagc cgcccagtg cgccttcac cgaggcctcc     720
atgatgatgt cctgatccaa gttcgccgac aaggagttgg tacacatgat cagctgggcc     780
aagaagattc ccggcttgt ggagctgagc ctgttcgacc aagtgcggct cttggagagc     840
tgttggatgg aggtgttaat gatgggctg atgtggcgct caattgacca ccccggcaag     900
ctcatctttg ctccagatct tgttctggac agggatgagg ggaaatgcgt agaaggaatt     960
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cacaagagat atctctgtgt caaggccatg atcctgctca attccagtat gtacctctg     1080
gtccagcgca ccgaggatgc tgacagcagc cggaagctgg ctcacttgct gaacgccgtg    1140
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atgctgaatg ccccacgtgct tcgccgggtgc aagtcctcca tcgaggggtc cgagtgcagc    1380
ccggcagagg acagtaaaag caaagagggc tcccagaacc cacagtctca gtga          1434
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Input Set : A:\2355-124 Seq List.txt
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77 <210> SEQ ID NO: 2
78 <211> LENGTH: 1251
79 <212> TYPE: DNA
80 <213> ORGANISM: Homo sapiens
81 <400> SEQUENCE: 2
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85 acaagcccca atgcttgtg gccaacacct gggcaccttt ctcctttagt ggtccatcgc 120
87 cagttatcac atcctgtatg cggaacctcaa aagagtccct ggtgtgaagc aagatcgcta 180
89 gaactcacct tacctgtaaa cagagagaca ctgaaaagga aggttagtgg gaaccgttgc 240
91 gccacccctg ttactggtcc aggttcaaag agggatgctc acttctgcgc tgtctgcagc 300
93 cattacgcat cgcatatcca ctatggagtc tggtcgtgtg aaggatgtaa ggccttttct 360
95 aaaagtagcc ttcaaggaca taatgattat atttgtccag ctacaaatca gtgtacaatc 420
97 gatcacaacc ggccacaagg ctgccaggcc tgccgacttc ggaagtgtta cgaagtggga 480
99 atggtgaagt gtggctcccg gagagagaga tgtgggtacc gccttgtgcg gagacagaga 540
101 actcggagag agcagctgca ctgtgcggcc aaggccaaga gaagtggcgg ccacgcgccc 600
103 ctattgccgg agctgctgct ggagccctg agccccgagc agctagtgct caccctcctg 660
105 gaggctgacc cgcccatgt gctgatcagc cgccccagtg cgccttcac cgaggctcc 720
107 atgatgatct ccctgaccaa gttggccgac aaggagttgg tacacatgat cagctgggcc 780
109 aagaagatcc cgggtttgt ggagctcagc ctgttcgacc aagtgcggct cttggagagc 840
111 tgttcgatgg agatgttaat gatgggctg atgttggcgt caattgacca ccccggcaag 900
113 tccactttg atctagatct tgttctggac agggatgagg ggaaatgcgt agaaggaatt 960
115 ctgcgaatt tttcatgct cctggcaact acttcaaggt ttcgagagtt aaaactccaa 1020
117 cacaagaaat atctctgtgt caaggccatg atcctgctca attccagtat gtaccctctg 1080
119 gtcacagcga cctaggatgc tgacagcagc cggaagctgg ctcacttgct gaacgccgtg 1140
121 ccgatgctt tggtttgggt gattgccaag agcggcatct cctcccagca gcaatccatg 1200
123 cgcctggcta acctcctgat gctcctgtcc cacgtcaggc atgcgaggtg a 1251
125 <210> SEQ ID NO: 3
126 <211> LENGTH: 66
127 <212> TYPE: PRT
128 <213> ORGANISM: Homo sapiens
130 <400> SEQUENCE: 3
131 Cys Ala Val Cys Ser Asp Tyr Ala Ser Gly Tyr His Tyr Gly Val Trp
132 1 5 10 15
134 Ser Cys Glu Gly Cys Lys Ala Phe Phe Lys Arg Ser Ile Gln Gly His
135 20 25 30
137 Asn Asp Tyr Ile Cys Pro Ala Thr Asn Gln Cys Thr Ile Asp Lys Asn
138 35 40 45
140 Arg Arg Lys Ser Cys Gln Ala Cys Arg Leu Arg Lys Cys Tyr Glu Val
141 50 55 60
143 Gly Met
144 65
146 <210> SEQ ID NO: 4
147 <211> LENGTH: 239
148 <212> TYPE: PRT
149 <213> ORGANISM: Homo sapiens
151 <400> SEQUENCE: 4
152 Leu Val Leu Thr Leu Leu Glu Ala Glu Pro Pro His Val Leu Ile Ser
153 1 5 10 15
155 Arg Pro Ser Ala Pro Phe Thr Glu Ala Ser Met Met Met Ser Leu Thr

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Input Set : A:\2355-124 Seq List.txt
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```
                20                  25                  30
Lys Leu Ala Asp Lys Glu Leu Val His Met Ile Ser Trp Ala Lys Lys
            35                  40                  45
Ile Pro Gly Phe Val Glu Leu Ser Leu Phe Asp Gln Val Arg Leu Leu
        50                  55                  60
Gln Ser Cys Trp Met Glu Val Leu Met Met Gly Leu Met Trp Arg Ser
    65                  70                  75                  80
Ile Asp His Pro Gly Lys Leu Ile Phe Ala Pro Asp Leu Val Leu Asp
                85                  90                  95
Arg Asp Glu Gly Lys Cys Val Glu Gly Ile Leu Glu Ile Phe Asp Met
            100                 105                 110
Leu Leu Ala Thr Thr Ser Arg Phe Arg Glu Leu Lys Leu Gln His Lys
        115                 120                 125
Glu Tyr Leu Cys Val Lys Ala Met Ile Leu Leu Asn Ser Ser Met Tyr
    130                 135                 140
Pro Leu Val Thr Ala Thr Gln Asp Ala Asp Ser Ser Arg Lys Leu Ala
145                 150                 155                 160
His Leu Leu Asn Ala Val Thr Asp Ala Leu Val Trp Val Ile Ala Lys
                165                 170                 175
Ser Gly Ile Ser Ser Gln Gln Gln Ser Met Arg Leu Ala Asn Leu Leu
            180                 185                 190
Met Leu Leu Ser His Val Arg His Ala Ser Asn Lys Gly Met Glu His
        195                 200                 205
Leu Leu Asn Met Lys Cys Lys Asn Val Val Pro Val Tyr Asp Leu Leu
    210                 215                 220
Leu Glu Met Leu Asn Ala His Val Leu
225                 230
<210> SEQ ID NO: 5
<211> LENGTH: 477
<212> TYPE: PRT
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 5
Met Asn Tyr Ser Ile Pro Ser Asn Val Thr Asn Leu Glu Gly Gly Pro
1               5                   10                  15
Gly Arg Gln Thr Thr Ser Pro Asn Val Leu Trp Pro Thr Pro Gly His
            20                  25                  30
Leu Ser Pro Leu Val Val His Arg Gln Leu Ser His Leu Tyr Ala Glu
        35                  40                  45
Pro Gln Lys Ser Pro Trp Cys Glu Ala Arg Ser Leu Glu His Thr Leu
    50                  55                  60
Pro Val Asn Arg Glu Thr Leu Lys Arg Lys Val Ser Gly Asn Arg Cys
65                  70                  75                  80
Ala Ser Pro Val Thr Gly Pro Gly Ser Lys Arg Asp Ala His Phe Cys
                85                  90                  95
Ala Val Cys Ser Asp Tyr Ala Ser Gly Tyr His Tyr Gly Val Trp Ser
            100                 105                 110
Cys Glu Gly Cys Lys Ala Phe Phe Lys Arg Ser Ile Gln Gly His Asn
        115                 120                 125
Asp Tyr Ile Cys Pro Ala Thr Asn Gln Cys Thr Ile Asp Lys Asn Arg
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RAW SEQUENCE LISTING DATE: 08/21/2003
PATENT APPLICATION: US/08/826,361B TIME: 16:25:18

Input Set : A:\2355-124 Seq List.txt
Output Set: N:\CRF4\08212003\H826361B.raw

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                 130                 135                 140
Arg Lys Ser Cys Gln Ala Cys Arg Leu Arg Lys Cys Tyr Glu Val Gly
145                 150                 155                 160
Met Val Lys Cys Gly Ser Arg Arg Glu Arg Cys Gly Tyr Arg Leu Val
                165                 170                 175
Arg Arg Gln Arg Ser Ala Asp Glu Gln Leu His Cys Ala Gly Lys Ala
            180                 185                 190
Lys Arg Ser Gly Gly His Ala Pro Arg Val Arg Glu Leu Leu Leu Asp
        195                 200                 205
Ala Leu Ser Pro Glu Gln Leu Val Leu Thr Leu Leu Glu Ala Glu Pro
    210                 215                 220
Pro His Val Leu Ile Ser Arg Pro Ser Ala Pro Phe Thr Glu Ala Ser
225                 230                 235                 240
Met Met Met Ser Leu Thr Lys Leu Ala Asp Lys Glu Leu Val His Met
                245                 250                 255
Ile Asn Trp Ala Lys Lys Ile Pro Gly Phe Val Glu Leu Ser Leu Phe
            260                 265                 270
Asp Gln Val Arg Leu Leu Glu Ser Cys Trp Met Glu Val Leu Met Met
        275                 280                 285
Gly Leu Met Trp Arg Ser Ile Asp His Pro Gly Lys Leu Ile Phe Ala
    290                 295                 300
Pro Asp Leu Val Leu Asp Arg Asp Glu Gly Lys Cys Val Glu Gly Ile
305                 310                 315                 320
Leu Glu Ile Phe Asp Met Leu Leu Ala Thr Thr Ser Arg Phe Arg Glu
                325                 330                 335
Leu Lys Leu Gln His Lys Glu Tyr Leu Cys Val Lys Ala Met Ile Leu
            340                 345                 350
Leu Asn Ser Ser Met Tyr Pro Leu Val Thr Ala Thr Gln Asp Ala Asp
        355                 360                 365
Ser Ser Arg Lys Leu Ala His Leu Leu Asn Ala Val Thr Asp Ala Leu
    370                 375                 380
Val Trp Val Ile Ala Lys Ser Gly Ile Ser Ser Gln Gln Gln Ser Met
385                 390                 395                 400
Arg Leu Ala Asn Leu Leu Met Leu Leu Ser His Val Arg His Ala Ser
                405                 410                 415
Asn Lys Gly Met Glu His Leu Leu Asn Met Lys Cys Lys Asn Val Val
            420                 425                 430
Pro Val Tyr Asp Leu Leu Leu Glu Met Leu Asn Ala His Val Leu Arg
        435                 440                 445
Gly Cys Lys Ser Ser Ile Thr Gly Ser Glu Cys Ser Pro Ala Glu Asp
    450                 455                 460
Ser Lys Ser Lys Glu Gly Ser Gln Asn Pro Gln Ser Gln
465                 470                 475
<210> SEQ ID NO: 6
<211> LENGTH: 416
<212> TYPE: PRT
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 6
Met Asn Tyr Ser Ile Pro Ser Asn Val Thr Asn Leu Glu Gly Gly Pro
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RAW SEQUENCE LISTING DATE: 08/21/2003
PATENT APPLICATION: **US/08/826,361B** TIME: 15:25:18

Input Set : **A:\2355-124 Seq List.txt**
Output Set: **N:\CRF4\08212003\H826361B.raw**

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300 1                   5                   10                  15
301 Gly Arg Gln Thr Thr Ser Pro Asn Val Leu Trp Pro Thr Pro Gly His
302             20                  25                  30
303 Leu Ser Pro Leu Val Val His Arg Gln Leu Ser His Leu Tyr Ala Glu
304         35                  40                  45
305 Pro Gln Lys Ser Pro Trp Cys Glu Ala Arg Ser Leu Glu His Thr Leu
306     50                  55                  60
307 Pro Val Asn Arg Glu Thr Leu Lys Arg Lys Val Ser Gly Asn Arg Cys
308 65                  70                  75                  80
309 Ala Ser Pro Val Thr Gly Pro Gly Ser Lys Arg Asp Ala His Phe Cys
310                 85                  90                  95
311 Ala Val Cys Ser Asp Tyr Ala Ser Gly Tyr His Tyr Gly Val Trp Ser
312             100                 105                 110
313 Cys Glu Gly Cys Lys Ala Phe Phe Lys Arg Ser Ile Gln Gly His Asn
314         115                 120                 125
315 Asp Tyr Ile Cys Pro Ala Thr Asn Gln Cys Thr Ile Asp Lys Asn Arg
316     130                 135                 140
317 Arg Lys Ser Cys Gln Ala Cys Arg Leu Arg Lys Cys Tyr Glu Val Gly
318 145                 150                 155                 160
319 Met Val Lys Cys Gly Ser Arg Arg Glu Arg Cys Gly Tyr Arg Leu Val
320                 165                 170                 175
321 Arg Arg Gln Arg Ser Ala Asp Glu Gln Leu His Cys Ala Gly Lys Ala
322             180                 185                 190
323 Lys Arg Ser Gly Gly His Ala Pro Arg Val Arg Glu Leu Leu Leu Asp
324         195                 200                 205
325 Ala Leu Ser Pro Glu Gln Leu Val Leu Thr Leu Leu Glu Ala Glu Pro
326     210                 215                 220
327 Pro His Val Leu Ile Ser Arg Pro Ser Ala Pro Phe Thr Glu Ala Ser
328 225                 230                 235                 240
329 Met Met Met Ser Leu Thr Lys Leu Ala Asp Lys Glu Leu Val His Met
330                 245                 250                 255
331 Ile Ser Trp Ala Lys Lys Ile Pro Gly Phe Val Glu Leu Ser Leu Phe
332             260                 265                 270
333 Asp Gln Val Arg Leu Leu Glu Ser Cys Trp Met Glu Val Leu Met Met
334         275                 280                 285
335 Gly Leu Met Trp Arg Ser Ile Asp His Pro Gly Lys Leu Ile Phe Ala
336     290                 295                 300
337 Pro Asp Leu Val Leu Asp Arg Asp Glu Gly Lys Cys Val Glu Gly Ile
338 305                 310                 315                 320
339 Leu Glu Ile Phe Asp Met Leu Leu Ala Thr Thr Ser Arg Phe Arg Glu
340                 325                 330                 335
341 Leu Lys Leu Gln His Lys Glu Tyr Leu Cys Val Lys Ala Met Ile Leu
342             340                 345                 350
343 Leu Asn Ser Ser Met Tyr Pro Leu Val Thr Ala Thr Gln Asp Ala Asp
344         355                 360                 365
345 Ser Ser Arg Lys Leu Ala His Leu Leu Asn Ala Val Thr Asp Ala Leu
346     370                 375                 380
347 Val Trp Val Ile Ala Lys Ser Gly Ile Ser Ser Gln Gln Gln Ser Met
348 385                 390                 395                 400
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/21/2003
PATENT APPLICATION: US/08/826,361B TIME: 16:25:19

Input Set : A:\2355-124 Seq List.txt
Output Set: N:\CRF4\08212003\H826361B.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:7; N Pos. 3,15,18
Seq#:8; N Pos. 12,18,24,27

VERIFICATION SUMMARY
PATENT APPLICATION: US/08/826,361B

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Input Set : A:\2355-124 Seq List.txt
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L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:388 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:401 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0